

Economic Development

Students' Learning Outcomes

After studying this chapter, students will be able to:

1. Discuss Economic Developments in Pakistan through decades.
2. Describe major metallic and non- metallic minerals resources of Pakistan, their economic value and distribution in Pakistan.
3. Explain the role agriculture plays in the economy of Pakistan.
4. Point out the agricultural potential of Pakistan along with problems and measures for maximization of yield.
5. Discuss the water resources of Pakistan and the existing irrigation system.
6. Discuss the production and distribution of major crops of Pakistan, livestock and fishing
7. Enumerate the pattern of modernization in agriculture.
8. Discuss the main problems associated with our agriculture.
9. Discuss the importance of industries in economic development.
10. Discuss briefly the location and production of cottage, small and large scale industries.
11. Discuss the importance of energy sources in development.
12. Discuss the production and consumption of different sources of energy.
13. Analyse international trade of Pakistan, its composition, direction and changing balance.
14. Enumerate the causes and consequences of poverty in Pakistan. Point out the steps to alleviate poverty.
15. Explain the importance of sea - ports of Pakistan.
16. Discuss the significance of dry ports of Pakistan.

Definition of economic development

According to Professor Arthur Lewis, “The increase in the production of goods and services is called economic development”. To lead a better life, fundamental changes are brought about in the economy which results in economic development. In short, the movement of a backward economy towards becoming a developed economy is called economic development.

Economic Development in Pakistan Through the Decades

The economic development of Pakistan through decades is explained below:

1. The first period of economic development: 1947 - 1950

The industrial units which Pakistan had got as share after its creation were incapable of fulfilling the country's needs. The source of income of the majority was agriculture. Before the creation of Pakistan the trade and industry was mostly controlled by non-Muslims. At the time of partition, these people migrated to India due to which a gap was created in the field of trade and industry. To fill this gap the majority of Muslim traders migrated from India and settled in Karachi. Karachi, thus, became the centre of our trade and industry. In 1947, the government held an industrial conference. In this conference it gave recommendations for the establishment of industrial units related to existing raw materials like jute, cotton, leather, etc. To promote the work of investors, Industrial Board and Industrial Financial Corporation was established, with which economic development started.

2. The second period of economic development: 1950 – 60

During the Korean War, from 1950 to 1952, Pakistan followed a liberal and soft trade policy which earned it a lot of foreign exchange. The war ended and there was a fall in the prices of raw materials. The government imposed restrictions on the import of goods of everyday usage which greatly benefited the industries.

In 1952 the government of Pakistan established a financial organization called “Pakistan Industrial Development Corporation”. This corporation basically invested in cement, paper, Sui gas pipeline, shipyard, etc. In 1959-60 the share of industrial field in Pakistan's GDP was 11.9 percent. During this time period, large scale industry flourished. Many factories were also established.

Pakistan's First 5 years Development Plan was for the period from 1st April 1955 to 31st July 1960. Its volume was 1080 crore rupees. With regard to objectives, this was a very good plan, but it could not achieve all its targets. According to the rate of

development there was an 11% increase in the national income. Per capita income could only increase 3%. The rate of national savings decreased. In the industrial field many industries were established such as paper (newsprint), cardboard, fertilizer, chemical products, etc. The rate of increase in population was approximately 1.6% per annum. During this period exports could not be increased, rather the number of imports rose. The balance of payment was greatly upset. There was a deficit of 24 crore rupees in the balance of payment in the first 4 years. The production of agricultural crops also could not be increased much.

From the above mentioned facts and figures, it can be estimated that the first 5 years plan failed in the majority of fields. Despite this fact it cannot be denied that due to the experiences gained in this plan, a modern thought process was born. This increased the speed of economic development and helped create future developmental plans.

3. The third period of economic development: 1960-1970

In 1958, after coming to power, Muhammad Ayub Khan gave severe punishments to hoarders, smugglers and black marketeers. Attention was paid to heavy machinery such as steel industry, petro-chemicals, etc. After 1965 there was a downfall in the development of industry and an increase in speed of development of agriculture. In relation to economic development in Pakistan, the Second 5 years Plan (1960 - 1965) has a special importance. The volume of the second 5 years plan was 1900 crore rupees. In 1961 it was increased to 2300 crore rupees.

Due to this plan, there was an improvement in the country's economic development. National income increased above 30%. In the industrial field, there was an increase of above 40% per annum. Exports went up by 7% annually. The agricultural field had a rise by above 15%. Employment opportunities could not be raised to the expected limits. The second 5 years development plan achieved its goals considerably and in some fields even crossed its set targets. In the economic development of Pakistan this plan has a special importance.

During 1965 – 1970, the third 5 years development plan was made. The volume of this plan was 5200 crore rupees. During the third 5 years plan the development in the industrial field was 9%. There was a drop of 4% in the rate of investment. Agriculture development was at 4.5%. The growth of exports was at the rate of 7% per annum. The third 5 years plan could not be provided with the resources and favourable conditions required for an economic development plan. That is why this plan could not be completely successful.

4. The fourth period of economic development: 1970-1980

The separation of East Pakistan from west Pakistan was a great tragedy. When in 1971

Zulfiqar Ali Bhutto took over power, Pakistan was surrounded by problems. In the first 7 years of this decade, economic development was disappointing. The currency devalued and the American dollar went up from 4.76 rupees to 11 rupees. The nationalization of oil factories, commercial banks, aeroplane companies, flour mills, and cotton ginning and rice threshing factories affected the economy negatively. During the rule of General Muhammad Zia-ul-Haq, the country moved towards economic development. The 1978 Economic Reforms Ordinance was issued. The industrial units related to agriculture were returned to their former owners. Due to this, the production of agricultural raw material increased, export percentage and the agricultural yield was greatly improved, but the government could not control inflation. Rs. 750 crore were allocated for the fourth 5 years plan (1970-75). The targets were not met for an increase in national income, agricultural yield and increase in per capita income. Due to unfavourable conditions inside the country, the fourth 5 years plan could not be implemented and, at last, it was cancelled.

5. The fifth period of economic development: 1980 - 1990

From 1980 – 1990 there was a record increase in the production of cotton, rice, sugar cane and wheat. Agricultural development was at the rate of 6.2% per annum. This can be called the best stage of economic development as steps were taken to restore the confidence of the private sector. Through 1982 and 1984, industrial policies created a balanced development, job opportunities, and strengthened the private sector. This led to an encouraging increase in the rate of production of raw material.

From 1978 – 1983, the fifth 5 year plan commenced. The volume of this plan was 2102 crore rupees. In spite of unfavourable circumstances, the per annum rate of development was 6%. Industrial production increased by 9% per annum. To encourage the setting up of industrial units, relaxations were also given. Inflation fell to 5%. During this plan special attention was paid to the development of rural areas. At least 20% poverty stricken people were provided help through the system of zakat. This was a big step towards social and economic justice.

The sixth 5 year plan (1983 – 1988) commenced on 1st of July 1983. Work was carried out quickly from 1985 to 1988 according to Prime Minister Muhammad Khan Junejo's 5 point programme. There was more investment from the private sector in industries and energy producing departments. Roads were built in villages and connected to city markets. The deserving were helped through Zakat and the system of Ushr. Different steps were taken for providing employment. Special attention was paid to the development of villages, backward areas, big and small cities. More attention was paid to education and health sectors. GDP (Gross Domestic Product) increased by 6.6% and agricultural production by 2.3%. There was an increase of 6% in exports and

6% in imports per annum. The rate of inflation was 6 %.The production of electricity increased by 13.6%.

After the elections held in December 1988, Mohtarma Benazir Bhutto came to power. The government lasted till 1990. During this period the economic condition of the country was hopeful. From 1989 to 1990, the GDP increased to a rate of 5.1%. Agricultural development was expected 5.2% but the increase was only 4% per annum. The balance of payment improved. The foreign trade deficit decreased and investment was encouraged in the country. In April 1989 the new economic policy was announced. Again new incentives were announced for the private sector. Setting up of new industries was made easier. Investment in new fields was made easy.

6.The sixth period of economic development: 1990 – 2000

In 1990 and 1996, the government of Mohtarma Benazir Bhutto was dissolved. In 1993 and 1999, the government of Mian Muhammad Nawaz Sharif came to an end. General Pervez Musharraf came to power in 1999. The seventh 5 years development plan (1988-1993) was put into action. During this time the G.D.P increased 5% per annum. The production in agriculture remained 4.7%. Industrial production increased by the rate of 5.9%. The rate of national savings remained 12.7% per annum. 50 medical centres were established in urban areas. Literacy rate remained 36%.

The eighth 5 years plan commenced in (1993-1998). During this plan many national institutions were handed over to the private sector. Due to the atomic blast in 1998, Pakistan had to face many economic sanctions. A census was carried out in 1998. GDP and agricultural sector showed an increase of 6% per annum. Private investment increased by 22.8%. Federal government tax returns were increased by 22.6%. Exports decreased by 24.9%. Literacy rate became 37.9%. National savings increased by 12.7%. After the 8th 5 years plan, no 5 years plan was implemented in the country.

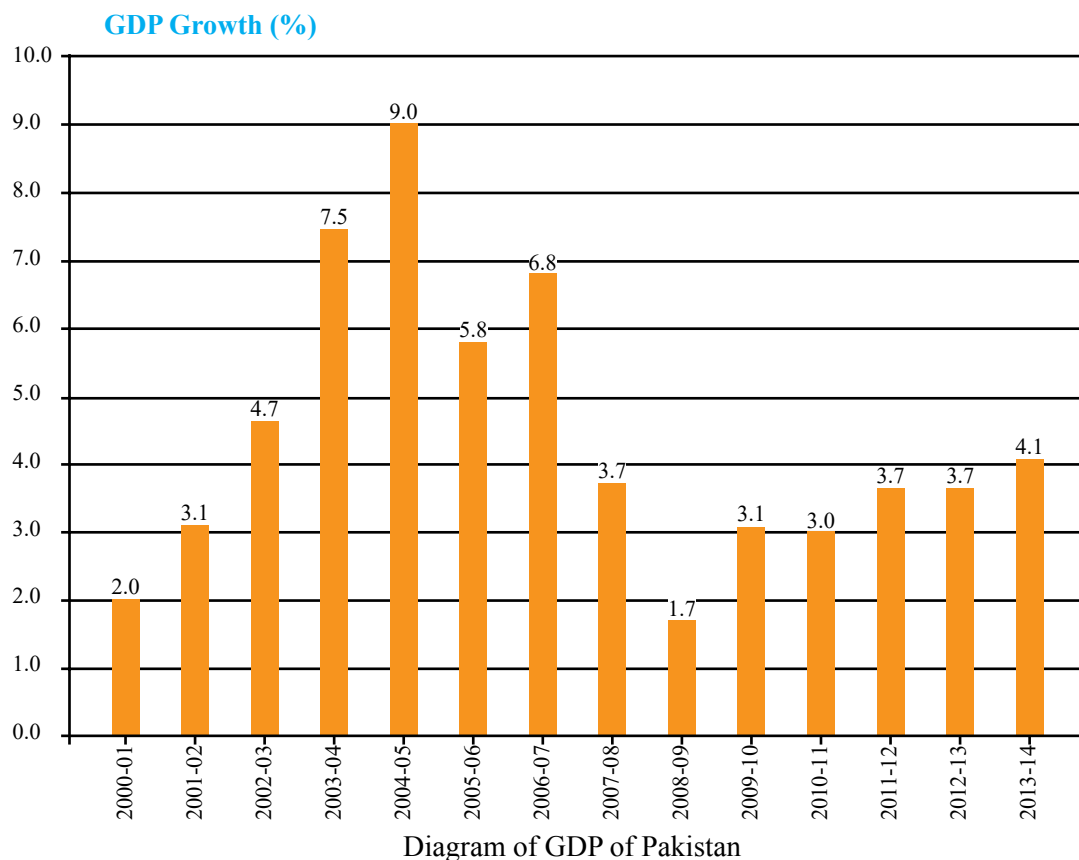
Now annual development plans are prepared and, accordingly, measures are taken for the national development.

7. The seventh period of economic development: 2000 – 2014

The pace of economic development in General Pervez Musharraf's 9 year government was 7%. Prime Minister Shaukat Aziz took many steps of economic development but the common man's problems increased greatly. Goods became more expensive. In the elections of 2008, Pakistan People's Party emerged as the majority party. Their government took many steps to solve the people's economic problems but the country is still in difficulties in relation to economic development.

In 2013, Muslim League (N) established its government with heavy (electoral) mandate.

In the fiscal year of 2014-15, the targeted ratio of GDP was 4.4%.



Economic Survey of Pakistan 2013-14

Important Sectors of Economy

Minerals, agriculture and industries play an important role in the economy of Pakistan. Find below the details of this:

(A) Minerals

The Mineral Development Corporation was established for the purposes of development of mineral resources in Pakistan in 1975. Minerals are divided into 2 groups, metallic and non-metallic. In Pakistan, the metallic minerals include iron, copper, chromite, etc. The non-metallic minerals include petroleum, natural gas, common salt, limestone, marble, gypsum, etc. Their detail is given below:

1. Petroleum

For human kind, the importance of petroleum and its products is more than all the minerals used in industries. The important products of petroleum include gasoline, kerosene oil, diesel, mobile oil, wax and coal tar. There are factories in Pakistan to refine oil. After the establishment of the Oil and Gas Development Corporation there was a lot of progress in oil exploration. The Potohar Plateau in Pakistan is an ancient region of petroleum production. The oil wells of this area are located in Balkassar, Khor, Dhallian, Joyamir, Manwal, Kot Sarong, Miyal, Aadlhi and Kaaziyan. In Lower Sindh the important oil producing areas are Khaskheli, Kinaat, Tando Allah Yar and Zamzama. These reserves have an important role in fulfilling the country's requirements.

2. Natural Gas

Natural gas was discovered in Pakistan in 1952 at Sui. These natural gas reserves are included in the world's biggest gas reserves. Natural gas is a cheap source of energy. This gas is used not only domestically but also in industries. Using pipelines, natural gas is transported to nearly all the big cities of Pakistan. In Punjab there are natural gas reserves in Dhodak, Pirkoh, Dhallian and Miyal. Its reserves are found in Uch and Zun in Balochistan and in Khairpur, Mizrani, Saari, Hindi, Kandhkot and Sarang in Sindh.

3. Copper

In ancient times, copper was used only to make coins, utensils, etc. Nowadays in Pakistan, it is used to make electrical products, especially wires, etc. The copper reserves discovered in Balochistan in Districts Chaghi, Saindak, Kalat, Zob and other areas are very important. In Khyber Pakhtunkhwa copper reserves are found in Dir, Chitral and Hazara.

4. Iron Ore

Iron ore was discovered in Pakistan in 1957. Iron ore reserves were discovered in many places in Pakistan. This includes Kalabagh (District Mianwali) Dol Nisaar (District Chitral), Langrial and Chilghazi (District Chaghi). Due to difficulties in transportation, there is less profit.

5. Coal

Coal is an important and ancient source of energy. In Pakistan coal is used for producing thermal electricity, baking bricks and for domestic purposes. Presently Pakistan coal is mined at Dandot, Padh and Makarwal in areas of Salt Mountain in the Punjab. In Sindh there are coal mines in Thar, Jampir, Sarang and Lakhra. In Khyber Pakhtunkhwa coal reserves are found only in Hangu. In Balochistan mining is being carried out in Khost, Sharg, Degari, Shirin Aab, Mach Bolan and Harnai.

6. Salt

Allah Almighty has blessed Pakistan with more than 100 million tons of reserves of rock salt. This salt is being used in food as well as in the chemical industry. In Pakistan huge reserves of rock salt are found in Salt Mountain in Khewra (District Jhelum). Vast reserves are also found in Kalabagh (District Mianwali), Warcha (District Khushab) and Bahadur Khel (District Karak).

Sea Salt is also obtained from Lasbela and the area near Makran's coast in Balochistan, and also from Mauripur (Karachi).

7. Chromite

Chromite is an important mineral which is mostly used for steel manufacturing. More than 25 large reserves of chromite have been discovered in Pakistan. Chromite is exported to many countries. It is also used in Karachi Steel Mill. In Balochistan reserves of chromite are found in Muslim Bagh, Chaghi and Kharaan. Its reserves have also been discovered in Malakand and Mohmand Agency in Khyber Pakhtunkhwa.

8. Gypsum

In the preparation of phosphate fertilizer, gypsum is used as a raw material. It is also used in cement industry, paper manufacturing, plaster of Paris, sulphuric acid, paint and polish industry and also in rubber industry. In Pakistan gypsum is found in Khewra, Dandot, Daud Khel, Quaidabad, Rohri, Kohat, Dera Ghazi Khan, Loralai, Sibbi, etc.

9. Limestone

Limestone is a very useful mineral. It is used in glass manufacturing, soap making, paper manufacturing, cement manufacturing, steel manufacturing, making of bleaching powder, white washing of building, paint manufacturing, paan, lime and soda ash industry. In Pakistan limestone is mostly found in northern and western mountainous areas. Reserves of limestone are found in Daud Khel, Wah, Rohri, Hyderabad, Sibbi, Dera Ghazi Khan, Kohat, Nowshera and Khizdaar.

10. Marble

Marble is used for floors and walls of buildings. There are different types and colours of marble in Pakistan. There are reserves of marble in Mardan, Swat, Nowshera, Hazara, Chaghi, Gilgit and Attock.

11. Sulphur

Sulphur is an important mineral. Sulphur is used in ordnance factories, sulphuric

acid, chemical industries, medicine manufacturing industry, safety match industry, preparation of ammonium sulphate fertilizer, preparation of paints and colours. Sulphur is found in Sultan Mountains (District Chaghi) Balochistan, Sunny (District Khachi) and Kalat. Sulphur reserves are found in Karachi, Hyderabad in Sindh and in Khyber Pakhtunkhwa in Peshawar and Chitral.

(B) Agriculture

Pakistan is an agrarian country. Agriculture plays a very important role in the economy of the country. The role of agriculture in Pakistan's economy is explained below:

1. Source of food

Pakistan is in the list of those developing countries where the agriculture is comprehended as the basic pillar of economy. Man's basic need is food which includes wheat, cotton, rice, corn, sugar cane, millet, pulses, vegetables and fruit, etc. Agriculture also fulfils the nutritional needs of all animals. This includes the feed crops of summer and winter.



2. Source of national income

The agricultural sector has been the main source of the national income of the country since Pakistan was created. Due to this, a development in the agricultural sector leads to an increase in national income. This leads to prosperity in the country.

3. Availability of raw material for industries

The following industries in Pakistan are dependent on the produce of the agricultural sector: flour mills, sugar mills, rice mills, cotton, textile industry, ghee mills, soap industry, bread, juice factories and fruit products.

4. Employment opportunities

A large proportion of Pakistani population is directly or indirectly related to the agricultural sector. These millions of people are linked to buying and selling in grain markets, fruit and vegetables markets. The labour force of the country which is approximately 44% is dependent on agriculture. Many people involved in transportation in the agricultural sector also earn their livelihood in this manner. In this way agriculture is the biggest profession of the most people in Pakistan.

5. Source of foreign exchange

Agricultural sector produce leads to agricultural exports. Pakistan earns a large amount of foreign exchange by exporting produce like rice, cotton and industrial products dependent on them.

6. Source of economic development

Nearly 21% of the collective national production of Pakistan is from the agricultural sector. Not only Pakistan's economic development but also industrial and trade development are dependent upon agriculture. Agriculture has a very important role in the economic development of the national economy.

Agricultural Potential of Pakistan along with Problems and Measures for Maximization of Yield

Pakistan is basically an agricultural country and is world famous for its agricultural produce. The resources of agricultural land all over Pakistan vary. Some areas have fertile agricultural land, excellent plains, good climatic conditions and excellent water sources under the land surface. Others do not have these favourable conditions. Some areas irrigate land through canals and tube wells, while others depend upon rainfall.

Due to these factors there is a difference in the per acre yield of different areas. Despite natural agricultural capacity the per acre yield of most crops in Pakistan is low. The important reasons for this are listed below:

7. Reasons for low per acre average yield

1. Pakistan has not been successful in achieving agricultural self sufficiency due to backwardness. In developed countries farming is carried out through modern machinery. In Pakistan farming is done through old and traditional methods. This does not let the per acre average yield increase.
2. In Pakistan there is a vast system of irrigation but the rivers cannot supply water to all agricultural lands which creates problems. This also affects the per acre yield.
3. Natural disasters (floods, earthquakes etc), water logging and salinity, low quality seeds and fertilizers, illiteracy amongst farmers, difficulty in obtaining agricultural loans, and diseases afflicting crops- all affect the per acre average yield.

Different steps to increase agricultural production

1. To develop the agricultural sector it is required that different agricultural tools and modern machinery should be used for farming on a scientific basis. This will increase the national income and the country will prosper.
2. Agricultural development requires the use of good quality seeds, pesticides and excellent fertilizers, along with human efforts and expertise.
3. The per acre yield can be increased through improvement in the canal system, and artificial and modern methods of irrigation.
4. The increase in research in the agricultural sector will also lead to increased agricultural production.

(C) Water Resources of Pakistan and the Existing Irrigation System

Sources of irrigation

Pakistan is located in that region of monsoon climate where there is less rainfall. In Pakistan agricultural development depends upon resources of irrigation. The most important resources of irrigation are canals. Other resources include tube wells, Karez, wells and springs etc.

1. Canals

In Pakistan, 80% of agricultural land is dependent upon canal water. Most of Pakistan's

canals are found in Punjab. This canal system is composed of big and small dams, barrages and link canals. Most of these canals are perennial which flow throughout the year. Other canals are seasonal, which flow only in the monsoon season. When snow melts on the mountains, water increases in the rivers. The flood water is then released into the canals. Important canals have been diverted from the River Ravi, Chenab, Jhelum, Sutlej and Indus, which irrigate different regions.

2. Rain

Rain is a natural source of water. In Pakistan the monsoon rains are more common. Water from rainfall on mountains and melting glaciers gathers in rivulets and keeps them flowing throughout the year. Barren areas and their production is more dependent on rain than canal irrigated areas. Tarbela and Mangla are important irrigational dams in which not only lakhs of acres feet water is collected but also cheap hydro electricity is produced. Besides these two reserves, Chashma Barrage has 5 lakh acre feet reserves of water as well.

3. Tube wells

To compensate for the scarcity of water from canals, tube wells are used to obtain water from below the ground. There are nearly 1.2 million tube wells (working) in the country. Water is obtained from a depth of hundreds of feet below the ground with the help of electric motors or diesel engines. Most of the tube wells are found in Punjab. Water from tube wells is not suitable for crops as it produces water logging and salinity in the land. Due to the shortage of water from canals, farmers are forced to use this water.

4. Karez

Below the surface of land, small canals or covered water courses are dug which are called Karez. Underground canals in Balochistan are used for irrigation. Water is collected in underground canals in the mountain valleys. This water is then transported to the land to be cultivated so as to prevent water loss through evaporation. Such underground canals are found in the base of mountains. Karez is mostly made in those areas where water is scarce and the process of evaporation is more. Groups of people make karez so that water can be used and not lost through becoming water vapors. To keep such underground canals clean, blocks are placed at intervals (below the ground), which can be removed when necessary for cleaning purposes.

5. Wells

Wells are the most ancient method of obtaining underground water. In Pakistan, the areas where canals are not found, wells are dug. Persian wheels are placed on these wells and water is then transported to fields. Wells are not very deep. During monsoon

season the water level rises in the wells due to underground water. During droughts, underground water level falls and the wells become dry.

6. Springs

An underground water source, which emerges naturally above the surface of land is called a spring. In the mountainous areas in Northern Pakistan, there are countless such springs. They are the most important source of water there. These springs fulfil a small part of the water requirements for domestic and farming purposes. Sometimes springs are found naturally in desert areas.

System of irrigation

Pakistan has a vast and strong system of canals. This system comprises big and small dams, barrages, irrigational and link canals. There are 3 types of canals in our country.

Perennial Canals

These canals provide water throughout the year for irrigational purposes. Upper Chenab, Lower Chenab, Upper Jhelum, Lower Jhelum and Lower Bari Doab are important perennial canals.

Seasonal canals

Rivers which only flow during the monsoon season or summer season are called seasonal rivers. When snow melts in mountainous regions, the increased water level in rivers releases water in these canals. In winter season, these rivers are not functional. The Bahawal and Qaimpur canals emerging from Islam Barrage located on River Sutlej and all the canals of Guddoo Barrage are seasonal.

Flood Canals

These canals have water released into them only at the time of severe floods so as to stop the destruction caused by floods. In summer and the monsoons, the water level rises in rivers and heavy floods raise water levels to dangerous extreme as well. To protect the barrage from harm, water is then released into these canals. Many canals emerging from River Indus and Chenab belong to this type.

Important canals of Pakistan

The important canals of Pakistan are narrated below:

1. Canals of River Ravi

Rivers Chenab and Jhelum are merged in the River Ravi by the Link Canals and then

taken out (new) canals from here. Except Baloki Sulemanki Link Canals 1& 2 and Lower Bari Doab, Sadhnai Canal which is taken out from Sadhnai Barrage are important canals of River Ravi. These canals irrigate the areas of Bari Doab and Neelibar.

2. Canals of River Chenab

Upper Chenab and Lower Chenab are important canals of the River Chenab which irrigate (the area of) Rachna Doab. In addition, Haveli Canal System is also located in this Doab, the headworks of which is Trimmu Barrage. Mailsi Canal, Rangpur Canal and Haveli Canal are taken out from here.

3. Canals of River Sutlej

Brisk flow of the River Sutlej is maintained by the link canals of Baloki Sulaimanki. By the canals taken out from Sulaimanki and Islam Barrages, the areas of Neelibar and Bahawalpur are being irrigated.

4. Canals of River Jhelum

The Upper Jhelum and Lower Jhelum canals are important canals of Doab. Due to these canals a vast area is being cultivated and agricultural production has increased. Besides Upper Jhelum, Upper Chenab and Lower Bari Doab are a part of Triple Canal Project. Rasool Qadirabad, Qadirabad Baloki and Baloki Sulaimanki Link Canal, join eastern and western rivers. They release water from the River Jhelum into the River Chenab, from the River Chenab into the River Ravi and from the River Ravi into the River Sutlaj. According to Indus Waters Treaty, this ensures that the scarcity of water in eastern rivers can be overcome through providing water from western rivers via link canals.

5. Canals taken out from Punjnad Barrage

The five flowing rivers in Punjab Province are merged at the place of Punjnad, where after constructing Punjnad Barrage, two canals Punjnad and Abbasia are taken out. These canals irrigate the districts of Bahawalpur and Rahim Yar Khan.

6. Canals of River Indus

- i. Thal Canal emerges from Jinnah Barrage in Kalabagh. This irrigates Thal Desert.
- ii. From Chashma Barrage, a link canal, Chashma Jhelum, emerges which takes water from the River Indus and supplies it to River Jhelum. On the right side, an irrigation canal emerges which irrigates the areas of Dera Ismail Khan.
- iii. Canals emerging from Taunsa Barrage irrigate Muzaffargarh, Rajanpur and Dera Ghazi Khan.

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- iv. Four canals emerging from Guddoo Barrage irrigate some areas of Sindh and Balochistan.
 - v. Canals emerging from Sukkur Barrage irrigate areas of Sindh.
 - vi. Kotri Barrage is an important barrage of Pakistan from which 4 irrigational canals emerge.

New Projects

To increase the sources of irrigation the government has started many new projects like Gomal Zam Dam, Garer Thal Canal, Reeni Canal, Meerani Dam, Sabk Zae Dam, Sat Para Dam and the expansion of Mangla Dam.

Indus Waters Treaty

In 1947, at the time of partition, Ferozpur Headworks built on River Sutlej and Madhupur on River Ravi were given to India. This was despite the fact that the canals emerging from them irrigated a vast area of Pakistan. India stopped the water flowing from these canals. This led to a water dispute between the two countries.

To solve this issue, with the cooperation of the World Bank, in 1960 both countries agreed to a treaty called the Indus Waters Treaty. According to this treaty 3 western rivers (Indus, Jhelum and Chenab) were Pakistan's share while 3 eastern rivers (the Ravi, the Sutlej and the Beas) went to India.

1. The Indus Water Plan

With 3 eastern rivers going into the custody of India, the availability of water from these rivers was no more possible. To overcome this scarcity, a vast irrigational plan was developed called the Indus Water Plan. Under this plan, 2 big dams, 6 barrages and 7 link canals were built. These link Canals helped in providing water from the western rivers to the eastern rivers. This helped to provide irrigation to the lands formerly being irrigated by the eastern rivers. Tarbela Dam on the River Indus and Mangla Dam on the River Jhelum are part of this plan.

2. Link Canals

Under Indus Water Plan 7 link canals were built. Their total length is nearly 590 km. Their names are given below:

1. Rasool-Qadirabad
2. Qadirabad-Baloki
3. Baloki-Sulaimanki

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4. Trimoun-Sidhnai
 5. Sidhnai-Mailsi, Bahawal
 6. Taunsa-Punjad
 7. Chashma-Jhelum

Production and distribution of major crops of Pakistan

The crops harvested in Pakistan are divided into 2 big groups according to seasons: Rabi Crops and Kharif Crops.

1. Rabi Crops

The season of Rabi Crops is from September to April. The crops mostly grown are wheat, barley, Bengal grams and oil producing crops.

2. Kharif Crops

The season of Kharif Crops is from April to October. Its important crops are rice, maize, cotton, sugar cane, sorghum and millet etc.

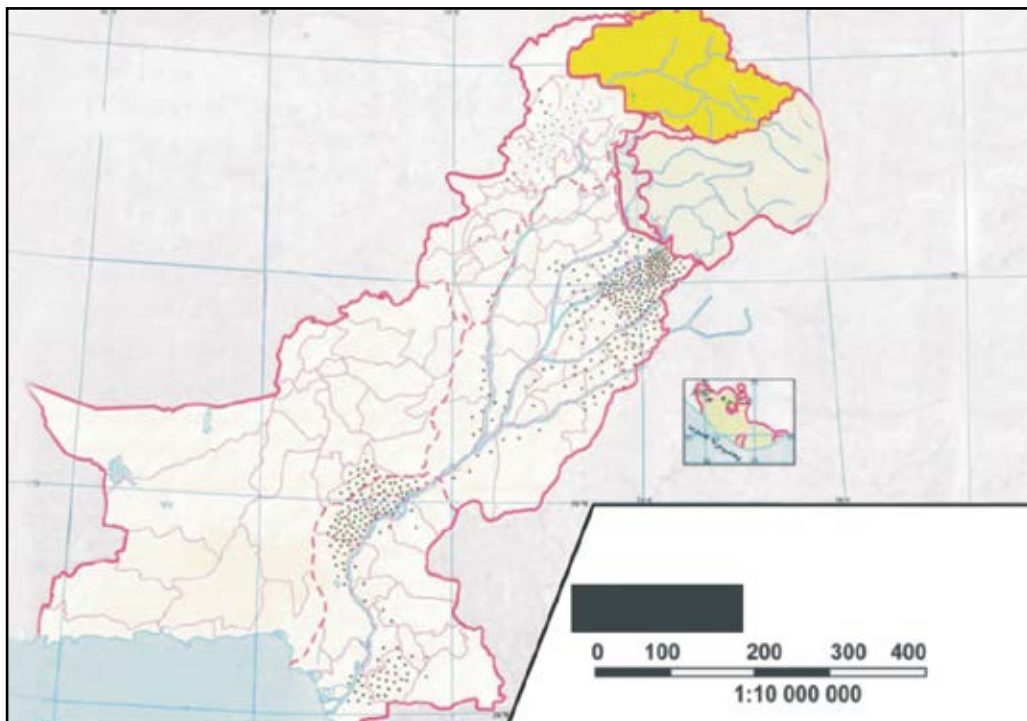
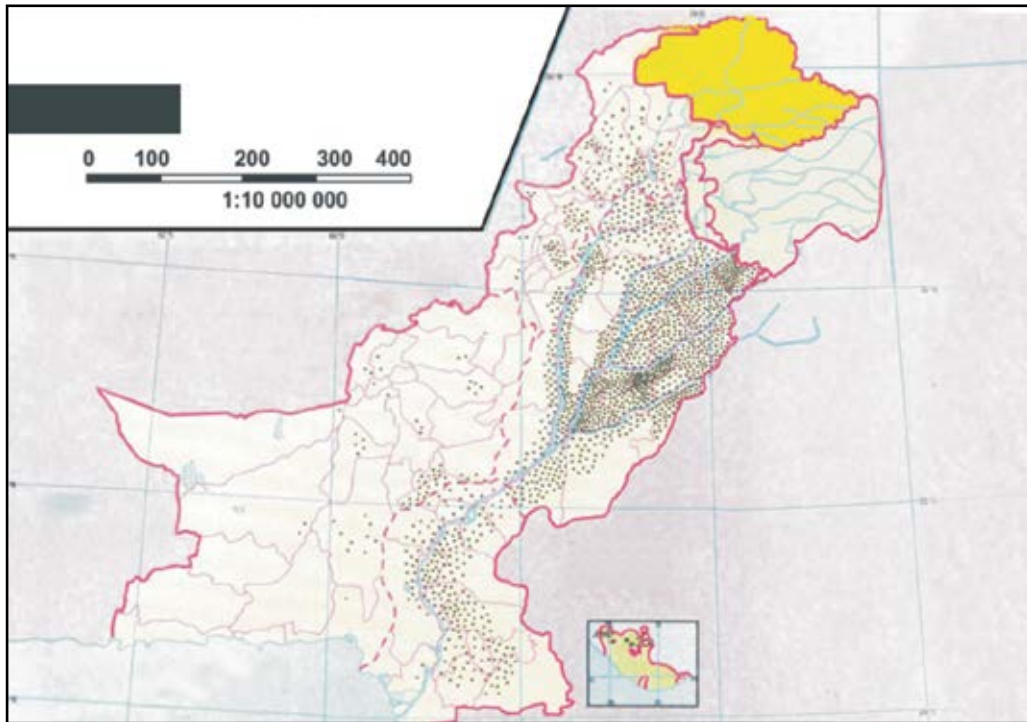
The details of Pakistan's important crops are found below:

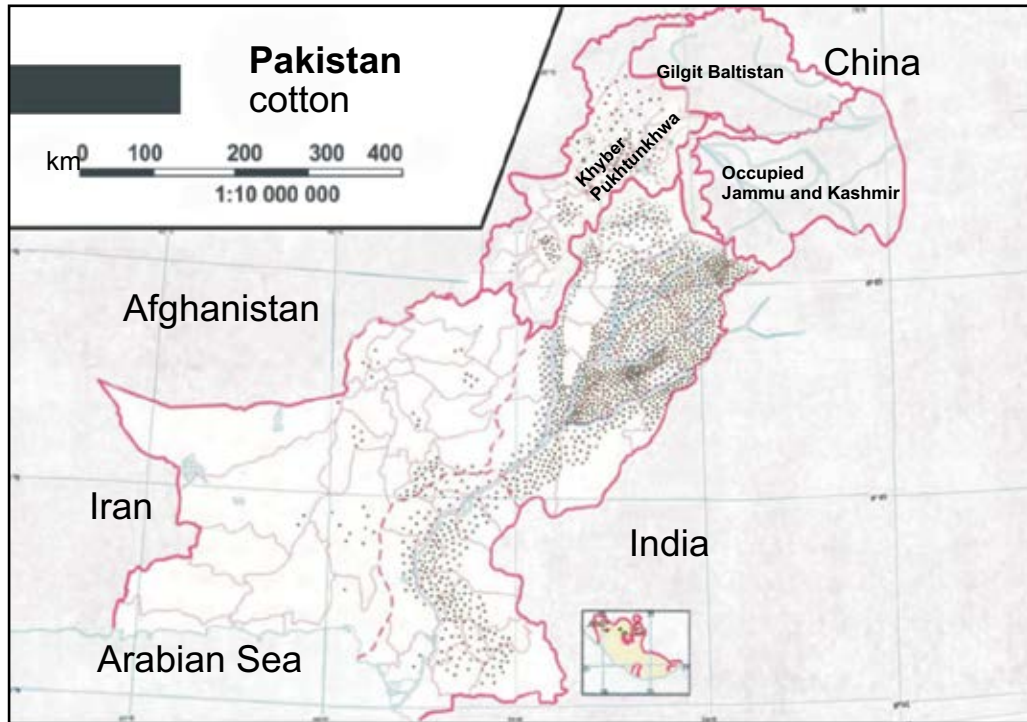
1. Wheat

Wheat is an important food crop of Pakistan which is the most favorite food of the majority population. According to the agricultural experts, loamy, clayey soil is very useful for the better production of wheat. The surface-level of land should be smooth for the supply of agricultural entrances equally to all the crop fields.

More than 2/3 of this crop is cultivated in areas where there is irrigation through canals. It is harvested on an area of nearly 8 million hectares every year. It is cultivated in the following type of areas: land irrigated by canals, deserts, semi-deserts and mountain areas.

According to the facts and figures of the economic survey of Pakistan 2013-14, more





than 25 million tons of wheat was produced in Pakistan. There are large regions of Pakistan where wheat is harvested such as:

Punjab: Multan, Sahiwal, Faisalabad, Sargodha, Muzaffargarh, Jhang, Bahawalpur, Dera Ghazi Khan.

Sindh: Sukkur, Hyderabad, Nawabshah, Khairpur.

Khyber Pakhtunkhwa: Dera Ismail Khan, Peshawar, Bannu, Charsadda, Mardan.

Balochistan: Naseerabad, Khazdaar, Lorelai, Kalat.

2. Rice

Rice is an important crop of Pakistan. Favourable conditions for its harvesting are hot and humid climate, continuous rainfall, fertile and soft soil and level land. It is the second important nutritional crop of Pakistan. It fulfils nutritional requirements and is an important source of earning foreign exchange.

According to the facts and figures of 2013-14 the production of rice is approximately 6.7 million tons. In Pakistan, rice is cultivated the most in Punjab in the districts of Gujranwala, Hafizabad, Sheikhpura, Sialkot, Narowal, Kasur, Lahore and Okara. The regions irrigated by canals in Sindh are famous for rice harvesting. Rice harvesting is also carried out in Khyber Pakhtunkhwa in Peshawar, Kurram Agency and in Naseerabad in Balochistan.

3. Maize

Maize is an important Kharif Crop used for nutritional purposes and as fodder for animals. It is harvested in the following areas: plains of Kohistan, the fields of Peshawar and Mardan, in Pakpattan, Sahiwal, Faisalabad, Sargodha, Muzaffargarh, Jhang, Bahawalpur, Dera Ghazi Khan and Okara in Punjab. It is used to manufacture corn oil, custard powder, popcorn, and jelly, etc. According to the facts and figures of the Economic Survey of Pakistan 2013-14, the per annum production of maize in Pakistan is in excess of 4.5 million tons.

4. Cotton

Cotton is a cash crop of Kharif. It is being harvested in the Indus Valley since 3000 BC. Fertile soil with good drainage is very suitable for its harvesting. The crop plucking season lasts from October to December. Of the total area where cotton is harvested in Pakistan, $\frac{3}{4}$ is in Punjab and the rest is in other provinces. Cotton crop provides raw material for manufacturing of cloth and banaspati ghee industries.

In Pakistan, the important areas where Cotton is cultivated are:

Punjab: Dera Ghazi Khan, Muzaffargarh, Jhang, Bahawalpur, Multan, Sahiwal and Lodhran.

Sindh: Thatta, Badin, Sukkur, Hyderabad, Nawabshah, Khairpur and Tharpakar.

Khyber Pakhtunkhwa: Dera Ismail Khan, Bannu.

Balochistan: Naseerabad, Jafferabad, Kalat.

According to the facts and figures of the Economic Survey of Pakistan 2013-14, the total per annum production of cotton is 12.8 million bales.

5. Sugar cane

Sugar cane is a cash crop of Kharif. It is the biggest source of obtaining sugar. Its growing requires excellent land and large quantity of water. Its cultivation starts in the month of February. It is cultivated mostly in canal irrigated areas of the country. According to the economic survey of Pakistan 2013–14, the total production per annum of sugar cane is 66.5 million tons. It is harvested in the plains of Punjab and also in the districts of Peshawar and Mardan.

6. Tobacco

Tobacco is a source of raw material for the cigarette manufacturing industry. Growing it requires very fertile soil. It is mostly harvested with the help of irrigation. It requires fertilizers in large amounts. To some extent, tobacco is sown in each district of Pakistan. But it is cultivated largely in Swat, Mardan, Swabi, Attock, Sahiwal, Gujrat, Vehari, Toba Tek Singh, Sukkur, Kalat and Mastung.

According to the economic survey of Pakistan 2013-14, tobacco's total production per annum is 0.108 million tons.

7. Fruits, vegetables and pulses

World famous date orchards are located in Multan, Khairpur and Kalat Divisions. In Pakistan's semi-dry climate, kinos, oranges and lemons are grown. Multan is famous for its mangoes. Excellent quality apples, peaches, cherries and pomegranates are grown in Quetta. Rain falls mostly in winter in Peshawar, Mardan, Hazara and Quetta Divisions— that is why apples, almonds, plums, apricots, and pears grow there. Excellent vegetables are cultivated in Pakistan such as potatoes, cauliflower, tomatoes, onions, green chillies, radishes, carrot, cucumbers, okra, gourds, turnips, aubergines, peas, etc. Besides this, different varieties of pulses and oil seeds are grown as well.

Livestock

Livestock rearing plays an important role in the agriculture of Pakistan. Sheep farming is the popular profession of people living in areas where there are grazing lands. This has a very important role in the economy of the country. This profession, in difficult times, is a source of support for farmers, non-farmers and people who do not own land. Bulls are used for ploughing the land and for transporting crops. Cows, buffaloes, sheep, goats, etc. are domestic animals. They are reared for milk, butter, ghee and

meat. Their hides are used for manufacturing leather products. The government has taken many steps and given facilities to promote livestock rearing. For this purpose a University of Veterinary and Animal Sciences was established in Lahore. Here the health of animals is taken care of and research carried out so that healthy animals of good breed can be bred. Other steps taken by the government include import of animals for reproduction purposes, training of related people, ending customs duty on livestock and dairy imports, etc.

According to the economic survey of Pakistan 2013-14 the approximate number of farm animals is given below:

buffaloes	goats	sheep	cows	camels	donkeys	horses
34.6 million	66.6 million	29.1 million	38 million	1 million	4.9 million	0.4 million

Fishing

Fishing is one of the oldest professions in Pakistan. Fish farming is an artificial method for reproduction purposes. Fish play an important role in increasing the national income and overcoming the scarcity of food. This lessens the load placed on the requirement of mutton, beef and poultry.

More than 4 lakh fishermen and their families are related to this profession. Fish is very important for human nutrition as it is an essential source of protein. The coastal areas of Pakistan are famous for their shrimps and other kinds of fish. Pakistan's rivers, lakes and fish farms also provide fish. According to the facts and figures of economic survey of Pakistan 2013-14, fish production of Pakistan is 514500 metric ton per annum.

Pattern of Modernization in Agriculture

1. The use of machines and fertilizers

In Pakistan there has been an increase in production in the agricultural sector due to the use of machines. There is a use of tractor and drills for the preparation and harvesting of land; for cutting, combine harvesters and to keep land level, laser land levelling—technology. Excellent fertilizers have also helped in increasing the per acre yield.

2. The use of good quality seeds

For the development of the agricultural sector in Pakistan, good quality seeds are being used. They help in increasing the per acre yield of different crops. Seeds are prepared inside the country as well as being imported from other countries.

3. Pesticides

The climate of our country is suitable for promoting crop diseases and insect growth. Pesticides are manufactured in Pakistan and also imported from abroad. These steps are taken to get rid of crop diseases and insects and they also increase production.

4. Improvement in the system of irrigation

The irrigation system in Pakistan has improved through developing the canal system, increasing the capacity of dams to store water, and construction of dams. Instead of traditional distributaries, irrigation is carried out through improved distributions. Economical methods like drip and sprinkler are being used for irrigation.

5. Water logging and salinity

Different plans are being devised to reclaim a vast area of land and make it cultivable. Steps have been taken to avoid water logging in further areas.

6. New roads

Farmers face difficulty in carrying their crops to markets. For this purpose new roads have been built in distant areas.

Main problems Associated with Agriculture

Find below a few of important problems the agricultural sector is facing in Pakistan.

1. Lack of agricultural inputs

Pakistani farmers are a victim of backwardness. Their financial condition is poor. The person who provides food for others is not getting sufficient food for himself. The procuring and usage of the following things is difficult for an average farmer: good quality seeds, chemical fertilizers, pesticides, tractors, thresher, harvester and modern methods of irrigation.

2. Inefficient use of cultivable area

In Pakistan, there is no planning to bring lakhs of acres of land under cultivation. Due to lack of capital and inadequate irrigation facilities very little of cultivable land is in use. To maintain the fertility of land, a large portion of land is left empty every year.

3. Natural disasters

Natural disasters like floods, earthquakes, storms and drought cause problems for farmers. These cause severe damage to the crops.

4. Inadequate irrigation facilities

In spite of the canal system in Pakistan, the sources of irrigation are inadequate. Water

is wasted in distributaries and fields. A large quantity of river water is lost in oceans and there are no adequate measures to store this water. Excessive load-shedding affects tube wells, and this is another set back for the crops.

5. Lack of intensive cultivation

In Pakistan, the use of advanced seeds, chemical fertilizers and agricultural machinery is not very popular. Less attention is paid towards cultivating more and more crops on agricultural land.

6. Lack of agricultural credit

Due to the scarcity of organizations giving agricultural credit, farmers take these loans from money lenders. The percentages of interest are huge. These people exploit the farmers and worry them.

7. Water logging and salinity

A large part of our agricultural land is not cultivable due to water logging and salinity. Besides this, every year a lot of land falls victim to river erosion. This decreases the fertile area.

8. Lack of efficient means of transportation

In our country, it is difficult to transport agricultural goods from villages to markets due to underdeveloped means of transport. As farmers do not have access to markets, the middlemen do not give sufficient payments to the farmers. This makes their financial condition poorer.

9. Plant diseases

Plant diseases kill plants or make them weak. According to an estimate, this lessens the crop productivity by 25%.

10. Backwardness of farmers

Illiteracy is a major reason for the backwardness of farmers. This makes the farmers unable to learn new methods or plan for better production.

11. Prices of agricultural goods

The prices of agricultural produce are much less as compared to industrial goods. Farmers prefer other professions and business rather than farming. This affects the agricultural sector.

Solution of agricultural problems

The following measures can be taken to solve agricultural problems:

1. Farmers should be given interest free loans for modern technology. The use of these loans should be supervised so that these amounts are not spent extravagantly.
2. For irrigation purposes, dams should be built to store rainwater. This will help in producing electricity and also protect from harm caused by floods.
3. Tube wells and wells should be established where canal water is not available to encourage farmers. Electricity should be made available for tube wells at cheaper rates.
4. Water logging and salinity are a big hindrance in the road to agricultural development in Pakistan. This makes agricultural land uncultivable. To gain control over these problems, long-term planning is required, so that cultivable land can be saved from harm. Measures to eradicate water logging and salinity should be taken. To save fertile land from erosion, trees should be planted.
5. All cultivable land should be used. Barren and desolate land should be made cultivable.
6. To increase the per acre production of wheat, rice and other agricultural products, seeds, chemical fertilizers and scientific methods of cultivation should be encouraged. Agricultural research centres should be established.
7. To protect farmers from the harms of fragmentation of land holdings, better legislation should be done for consolidation of land holdings.
8. Methods of protection from natural disasters like floods should be devised. To increase the depth of rivers, banks should be built on the sides of the rivers.
9. Encourage farmers through higher pricing of agricultural crops. Provide farmers with free advice and basic needs so that industries based on agriculture can flourish. These industries should be established near the relevant areas.
10. To transport agricultural produce to markets, means of transport should be developed. The interests of farmers should be protected in the markets. The system in markets should be modernized to encourage farmers and develop the agricultural sector.

Industries of Pakistan

The role of industry in the economic development of a country is considered very important. It produces industrial goods and raw material and fulfils many of our needs. It brings new goods into the market and changes the way we spend. Following are details of the cottage, small and large scale industries of Pakistan.

1. Cottage Industries

An industry or act of production which is carried out in homes or on a small scale falls in the category of cottage industries. Cottage industries usually include those industries in which Pakistani craftsmen use old fashioned, simple tools and traditional methods. Local raw material is used in these industries. Cottage industries play an important role in the industrial development of a country. These products form 30% of the exports of Pakistan. Our famous cottage industries include:

- i. craft of spinning with a spinning wheel
- ii. leather goods manufacturing
- iii. craft of making clay utensils
- iv. wood and iron craft
- v. different items of daily use from leaves and cane
- vi. embroidery on clothes
- vii. weaving cotton, making woollen and jute items with hand tools
- viii. Metal goods, and dagger and knife manufacturing
- ix. sports goods manufacturing
- x. silver and gold craft
- xi. stone craft
- xii. clay toys manufacturing

Handicrafts industry is being carried out in each province and villages of Pakistan since ancient times. It is practiced according to individual cultures and is still popular today.

2. Small industries

In the industrial sector of Pakistan, a large number of people are associated with small industries. Small industry means that industry which employs 2 to 9 workers and manufactures different items. A few of our small industries are listed below:

- i. dairy farm industry
- ii. bee-keeping industry
- iii. utensil making industry
- iv. fan, electric motor making industry
- v. poultry farming
- vi. carpet weaving
- vii. sports good manufacturing industry

viii. manufacturing of stainless steel cutlery, etc.

These days, it is difficult for small industries to receive the facilities like the large scale industries. Their competition is with large scale industries which sell better quality products. As a result, small industries suffer.

3. Large scale industries

The following large scale industries in Pakistan are very important:

- i. sugar industry
- ii. Iron and steel industry
- iii. petroleum and petroleum products industry
- iv. automobile (jeeps, cars) industry
- v. armaments industry
- vi. heavy machinery industry
- vii. buses, tractors industry
- viii. motorcycle industry
- ix. machinery, T.V. sets industry
- x. refrigerator, air-conditioner industry
- xi. tobacco and cigarette industry
- xii. textile and textile related industries
- xiii. leather and leather goods industry
- xiv. paper and paper products industry
- xv. cosmetics industry
- xvi. tyres and tubes industry

Different sources of energy

Energy plays an important role in the economic development of a country. Electricity is an important source of energy which fulfils industrial and domestic needs. Natural gas is used for producing thermal electricity, in homes, industries, for cars and other needs. In Pakistan petroleum is an important source of energy as well. Pakistan fulfils its requirements of energy mostly with the use of petroleum. Coal is also used in industries. The rising prices of petroleum and gas have led to the increased importance of coal. We are forced to look for alternate sources of energy and coal is one of them. Electricity, gas, petroleum and coal are important sources of energy in Pakistan. Their details are as follows:

1. Electricity

Electricity is obtained by the following methods in Pakistan:

i) Hydro-electric power

In our country, suitable areas for producing hydro-electric power are located in the northern and north western mountain ranges. Natural conditions are present there for the generation of electricity. In the plains it is possible to produce hydro-electric power through increasing the force of flowing water in rivers and canals. The large projects for producing hydro-electric power are given below:

1. Tarbela Dam (located on River Indus) is the biggest project for production of hydro electric power. Ghazi Brotha project is the second biggest project.
2. Mangla Dam (located on River Jhelum) is the third biggest source of hydro-electric power in Pakistan. Warsak Dam has been built on River Kabul. Besides these, hydro-electric power is also produced in Chashma hydro-electric power station, Malakand, Dargai hydro-electric plan and Rasool hydro-electric station.

ii) Thermal–electric power

In Pakistan, thermal–electric power stations produce electricity with the help of gas, oil and coal. Important thermal- electric power producing units are located in Karachi, Lahore, Multan, Faisalabad, Guddoo, Jamshoro, Muzaffargarh, Sukkur, Larkana, Kotri, Pasni and Kot Addu.

To meet the energy requirements in the future, many plans have been made and quick measures are being taken to implement some of these plans.

According to the economic survey of Pakistan 2013-14, the share of different sources in the production of electricity.	
petroleum	35%
gas	29%
coal	0.1%
hydro and nuclear power	35.9%
total	100%

iii) Nuclear power

Pakistan Atomic Energy Commission (PAEC) is responsible for the planning, setting up, running of nuclear power plants in Pakistan. In the present era, the atom is the most modern and complicated source of producing energy. It is playing an important role in meeting the ever increasing energy requirement of the world.

Nuclear energy was first introduced in Pakistan in 1971 when the first plant “Karachi

Nuclear Power Plants (KANUPP)” was established. The second nuclear electricity station was established in Chashma called “Chashma Nuclear Power Plants Unit 1”. On 13th June 2000 it was attached to the national grid. Besides these “Chashma Nuclear Power Plants Unit II” is in production now.

iv) Solar-electric power

The energy received from the Sun is called solar power and this is used to produce electricity. Presently solar power is being used on a small scale in Pakistan. Small machines and small motors are run on solar energy. In the near future solar power will be the biggest source of energy. This is so because other sources of energy are expensive and difficult to reach.

v) Wind-electric power

To obtain wind-electric power, fast moving windmills are used to produce electricity. Work is underway in Pakistan to produce wind-electric power. Even though vast resources for producing wind-electric power are found in coastal areas, Sindh and Balochistan, yet till now this source has not been used much. Windmills comprise 3 or 4 big blades mounted on a nearly 80 feet high pole. These blades are called the turbines of the windmill. When these turbines move with the wind then energy is produced.

2. Natural Gas

According to the economic survey of Pakistan 2011-12 the daily average production of natural gas in Pakistan is 4000 million cubic metre. This meets more than 40.3% of the energy requirements of the country. It is an extremely cheap and clean source of energy. It is an excellent alternative to coal and petroleum. Besides domestic use, natural gas is also used in urea, rayon, plastic, and many other industries as raw material as well. The largest reserves of natural gas are found in Sui which were discovered in 1952. Some reserves of natural gas can be found in southern and northern Sindh. Besides this some gas is obtained from Potowar in Punjab. In Pakistan the approximate reserves of natural gas are 29.671 trillion cubic feet.

According to the economic survey of Pakistan 2013-14, the use of natural gas in different sectors of Pakistan are as follows:	
Sectors where gas is used	Quantity of gas (% age)
for domestic use	23.2%
for thermal power generation	26.1%
trading	3%
for industries	21.7%

for producing urea	19%
transport (CNG)	7%
total	100%

3. Petroleum

According to the Economic Survey of Pakistan 2013-14 the daily average production of petroleum is approximately 66,000 barrels. The “Oil and Gas Development Company Limited (OGDCL)” was established in 1961 to explore oil and gas in Pakistan. Petroleum is a very big source of energy. 35% of the national energy needs are met by petroleum. The geological conditions of Pakistan are the proof that there are vast prospects of presence of petroleum. There are more than 90 oil fields in Pakistan. Most of them are located in Lower Sindh and Potowar Plateau.

4. Coal

According to the Economic Survey of Pakistan 2013-14 the per annum production of coal is 4000 metric ton. Coal is a cheap fuel. Its approximate reserves in Pakistan have been estimated at more than 186, billion tons. Coal reserves are located in Balochistan, Potowar and southern Sindh. Thar in Sindh, has the largest coal reserves in Pakistan.

According to the Economic Survey of Pakistan 2013-14 the usage of coal in various sectors is as follows:	
sectors where coal is used	% age share
for thermal power generation	1.4%
for brick kilns	47.1%
for cement industry	51.5%
total coal consumption	100%

International trade of Pakistan

Some countries have a large quantity of mineral reserves. Other countries are very advanced in the field of agriculture. Some countries can produce themselves goods for their needs at cheaper rates. Other countries are obliged to export their manpower to foreign countries. The vast imbalance of goods of needs makes the basis of the beginning of international trade. Every country wants to limit its needs so that it has to import very few goods. On the other hand, efforts are made to export larger quantities of goods manufactured in their country to other countries. This earns foreign exchange.

Export of Pakistan

According to facts and figures of the economic survey of Pakistan 2013-14 the total volume of Pakistan's exports was nearly 20997 million American dollars. The important exports of Pakistan are as follows:

1. Rice

Pakistan produces excellent qualities of rice. Trading of rice with foreign countries is under the supervision of a government organization called Rice Trading Corporation. This organization buys rice from private companies and factories and exports to countries like- Saudi Arabia, United Arab Emirates, Kuwait, Abu Dhabi, Iraq, Iran, Brazil, Libya, Sri Lanka, Singapore, Indonesia, Britain, Canada, Germany and America. In 2013-14 Pakistan exported rice worth nearly 1850 million dollars.

2. Cotton and cotton Products

Different types of cotton is cultivated in our country. In 2013-14 Pakistan earned foreign exchange of nearly 11437 million dollars through cotton and its products. Pakistan exports the following cotton and its products.

(i) Raw cotton

Pakistan's raw cotton is of excellent quality and very fine. It is in great demand in foreign countries. Pakistan mostly exports raw cotton to Canada, America, Japan, Hong Kong, Britain, Italy, France, Poland, Germany and Belgium etc.

(ii) Cotton cloth

Cotton cloth plays an important role in the exports of Pakistan. Pakistan mostly exports cotton cloth to Britain, America, Sri Lanka, Afghanistan, Russia, Germany, Hong Kong and Poland.

(iii) Cotton yarn

Excellent quality and fine cotton yarn is produced in large quantities in Pakistan. There is a great demand for it abroad. Countries which import our yarn include Russia, Sudan, America, Poland, Germany, Iran, Britain, France and some African countries.

(iv) Hosiery goods

Like the other cotton products, the hosiery goods industry in Pakistan is also important. It produces vests, socks, handkerchiefs, sweaters and towels. Hosiery goods are exported to Middle Eastern countries, America and Europe.

(v) Readymade garments

Garments manufactured in Pakistan are gaining popularity abroad. Readymade garments from our country are exported to Saudi Arabia, United Arab Emirates, Iran, Iraq, France, Germany, Britain, Sri Lanka, Malaysia, and America.

3. Sports goods

The Pakistani cities of Sialkot and Lahore are famous for the manufacturing of sports goods. Worth mentioning are the equipment of volleyball, football, carom board, hockey, and cricket. Holland, Belgium, France, Italy, Britain, Germany and America etc are important buyers of our sports goods. In 2013-14 the foreign exchange earned from the export of sports goods was nearly 286 million dollars.

4. Leather and leather goods

Animals give us milk, butter and meat. Their hides also helps us meet our various needs. There are many tanneries in Pakistan to dye and prepare leather. Leather has helped in the development of the shoe making industry and goods like suitcases, bags, jackets, sacks and other products. Leather goods are mostly exported to Japan, Germany, France, Britain, America, Italy, Russia, Spain, China, Bangladesh and Middle Eastern countries. In 2013-14 Pakistan exported nearly 519 million dollars worth of leather and leather products.

5. Carpets, rugs and mats

Pakistan holds a special position in carpet weaving. Lahore, Faisalabad, Multan, Jhang, and Sangla Hill are famous for carpet weaving. We export our carpets, rugs and mats to Germany, Switzerland, Belgium, Italy, France, America and Britain etc. According to the economic survey of Pakistan 2013-14, Pakistan earned nearly 106 million dollars in foreign exchange through the export of these products.

6. Cement

Pakistan has progressed greatly in the cement industry. After fulfilling national needs it is exported to Saudi Arabia, United Arab Emirates, Kuwait, Bahrain, India, etc. In 2013-14 Pakistan exported cement worth 415 million dollars.

7. Surgical instruments and medical equipments

Pakistani manufactured surgical instruments and medical instruments are famous all over the world. These instruments are exported to Latin America, Africa, Britain, France and Germany etc. According to the Economic Survey of Pakistan 2013-14, we earned foreign exchange worth 281.7 million dollars from surgical instruments and medical equipments.

8. Fish and fish products

Fish has great importance in human nutrition. Fish from Pakistan is in great demand all over the world. The following countries are important buyers of our fish and fish products – China, United Arab Emirates, Thailand, Korea, Malaysia, Indonesia, Hong Kong, Middle East and Sri Lanka etc. In 2013-14 Pakistan exported fish and fish products worth nearly 292 million dollars.

9. Dry fruits, fruits and vegetables

Pakistan exports dry fruits to Italy, Britain, America, Arab countries, Sri Lanka, Singapore and Malaysia. Fruits and fresh vegetable are exported to Iran, Germany, Middle East and some countries of Europe. Pickles, sherbets, chutneys, marmalade and jams etc. prepared in Pakistan are exported to Arab countries. In 2013-14 Pakistan earned nearly 586 million dollars in foreign exchange from export of dry fruits, fruits and vegetables.

10. Chemical and pharmaceutical products

In the past many years, the chemicals pharmaceutical industry has greatly progressed. Many countries of Middle East and Africa are buyers of our chemicals and pharmaceuticals. In 2013-14 Pakistan exported nearly 963 million dollars worth of these products.

Imports of Pakistan

In 2013-14 the volume of Pakistan's imports was approximately 37104 million dollars. The important imports of Pakistan are given below:

1. Petroleum and Petroleum Products

Pakistan has to spend a great amount of foreign exchange on import of petroleum. To

lessen the amount of foreign exchange spent, many products of petrol and gas are being manufactured in Pakistan. To fulfil its needs Pakistan imports oil, petrol, diesel and other petroleum products like plastic etc from Saudi Arabia, Kuwait, Abu Dhabi, Iran and Iraq. According to the Economic Survey of Pakistan 2013-14, we spent approximately 12205 million dollars on imports of petroleum and its products.

2. Iron and steel

To fulfil the national requirement for iron and to run our factories, steel and its manufactured products are imported from Germany, Belgium, Britain, France, America, Japan, and Australia. With the help of Russia we have established a steel mill in Karachi. In 2013-14 Pakistan imported iron and steel products worth 1107 million dollars.

3. Machinery

A very big factory for production of iron and heavy machinery has been established at Taxila. Heavy machinery for different factories is manufactured in Pakistan. Nevertheless, electric generators and excellent quality machinery is imported. In 2013-14 Pakistan spent 5176 million dollars on import of machinery.

4. Fertilizer

There are many factories in Pakistan which manufacture chemical fertilizers. In order to fulfil national requirements some types of fertilizers are imported from Iraq, Tunisia, Italy and America. In 2013-14 Pakistan imported 584 million dollars worth of chemical fertilizers.

5. Edible oil

Pakistan imports edible oil mostly from America, Sri Lanka and Malaysia. According to the Economic Survey of Pakistan 2013-14, Pakistan spent approximately 1608 million dollars on import of edible oil.

6. Tea

Tea is consumed in large quantities in Pakistan. Pakistan imports tea mostly from Bangladesh, Kenya and Sri Lanka. A lot of foreign exchange is spent on this. In 2013-14 Pakistan imported tea worth approximately 247 million dollars.

7. Miscellaneous

A large amount of foreign exchange is spent on the import of pharmaceuticals, paper, armaments, milk products, dry fruits, pulses, electrical goods, computers, pesticides, mobiles and cars.

Composition of Pakistan trade

Composition of Exports

According to fact and figure of 2013-14 the total exports of Pakistan were in 3 fields- cotton and cotton products (53.9%), rice approximately (8.7%), leather and leather goods (4.9%) – total (66.5%). The share of the following in the total exports was – consumable goods 15%, semi finished goods 10%, finished goods 75%.

Composition of imports

In 2013-14 the share of 9 sectors in the total imports was approximately 80% - machinery, petroleum and petroleum manufactures, chemical, transport, edible oil, iron and steel, fertilizer and tea. The share of imports was as follows- heavy goods 30%, raw material for heavy goods 10%, raw material for consumable goods 51% and consumable goods 9%.

Directions of Pakistani Trade

According to economic survey of Pakistan 2013-14, Pakistan's exports are mostly being bought by America, China, UAE, Afghanistan, Britain, Germany, France, Bangladesh, Italy and Spain. In 2013-14 the share of the following countries in Pakistan exports was 61%:

Large markets for exports 2013-14	
country's name	(% share)
America	15%
China	10%
UAE	8%
Afghanistan	7%
Britain	6%
Germany	4%
France	3%
Bangladesh	3%
Italy	3%
Spain	2%
other countries	39%
total balance	100%

According to the survey of Pakistan 2013-14, Pakistan's imports mostly come from UAE, China, Kuwait, Saudi Arabia, Malaysia, Japan, India, America, Germany, Indonesia etc. According to table below the share of these countries in Pakistan's imports was 73% in 2013-14.

Large markets for imports 2013-14	
Country's name	% share
UAE	17%
China	16%
Kuwait	10%
Saudi Arabia	7%
Malaysia	5%
Japan	4%
India	4%
America	4%
Germany	3%
Indonesia	3%
other countries	27%
total balance	100%

Balance of trade

The difference between the value of exports and imports of any country in a given time frame is called balance of trade. If the value of exports is higher than value of imports then this balance of trade is profitable for a country. Contrary to this if the value of imports is higher than the value of export then this is called trade deficit. This type of trade is unprofitable and a country falls prey to debt. In 2013-14, Pakistan's exports were 20997 million American dollars and imports were worth 37104 million American dollars. In this manner our trade deficit was 16107 million dollars.

The causes of poverty and measures to eradicate poverty

Poverty is an important problem of Pakistan. A person earning less than 1.25 dollar per day is living below the poverty line (according to World Bank). Presently 21% of the world's 7 billion population is the victim of poverty because they earn less than 1 dollar. In Pakistan 7% of the cities population lives below the poverty line while

the ratio is 15% in villages. Poverty leads to hopelessness and the pace of economic development slows down.

1. Reasons for poverty in Pakistan

- i. Pakistan's population is increasing quickly. Compared to this, there is less increase in production capacity.
- ii. Rate of inflation is high.
- iii. Due to energy crisis, employment opportunities are limited.
- iv. Illiteracy and lack of technical education.
- v. Economic development is slow and trade activities are limited.
- vi. There are few opportunities for local and foreign investment due to the country's condition.

2. Measures for poverty reduction

- i. Job opportunities should be created in different departments.
- ii. Loan schemes for youth should be started so that they can establish their own businesses.
- iii. Deserving students in educational institutions should be provided aid.
- iv. Citizens should be provided with basic facilities.
- v. Deserving people should be helped with finances from Bait-ul-Maal and Zakat Fund.

Importance of seaports of Pakistan

Pakistan's seaports hold a position of great importance. Nearly all of Pakistan's trade is carried out through sea-routes. For this purpose the oldest seaport in Pakistan is in Karachi which is of international standard. Here facilities are available for the loading and unloading of trade goods from ships and oil tankers. The increasing national requirements led to the construction of Bin Qasim Port in the east of Karachi. In the first stage 8 berths were built here to accommodate ships. Bin Qasim Port is located near Pakistan steel mills. Therefore it is being used for the import of goods for large scale factories and raw iron.

On Balochistan's coast line a seaport has been built with modern facilities in Gwadar, with the help of China. For purposes of trade, ships hold great importance along with facilities provided by seaports. Ships are under the responsibility of Pakistan National Shipping Corporation. To carry trade goods to foreign countries, Pakistan has more than 50 cargo ships. These are not very big but can travel to distant sea routes easily.

These ships transport goods to Japanese and Chinese seaports in the East, and to Muslim countries, European countries, Britain and American seaports in the west. Then they transport the goods from these countries to Pakistan and earn huge profits.

Importance of dry-ports of Pakistan

In 1973, the first dry-port of Pakistan was constructed in Lahore. After its success, the dry-ports in Karachi (1974), Quetta (1984), Peshawar (1986), Multan (1988) and Rawalpindi (1990) were established. Besides them, many dry-ports under private-sector were also established, two of them, Sialkot dry-port (1984) and Faisalabad dry-port (1994) are important. Because of these dry-ports, positive changes have occurred which increased the trade volume of the country.

Exercise

(Part-1)

📌 Four options are given for each question. Tick (✓) the correct option.

- i. Economic development means:
 - (a) increase in national income
 - (b) increase in agricultural income
 - (c) increase in employment
 - (d) increase in production and services sector
- ii. Pakistan government established “Pakistan Industrial Development Corporation” in:
 - (a) 1942
 - (b) 1948
 - (c) 1956
 - (d) 1952
- iii. Pakistan’s economy is:
 - (a) developed
 - (b) underdeveloped
 - (c) extremely developed
 - (d) extremely poor
- iv. 5 year developmental plan started in Pakistan in:
 - (a) 1950
 - (b) 1955
 - (c) 1958
 - (d) 1960
- v. The first dry port was built in Pakistan in:
 - (a) Karachi
 - (b) Lahore
 - (c) Sialkot
 - (d) Peshawar
- vi. Pakistan imports edible oil from America, Sri Lanka and:
 - (a) Iran
 - (b) Saudi Arabia
 - (c) Hong Kong
 - (d) Malaysia

- vii. The largest scheme for producing hydro-electric power in Pakistan is:
(a) Ghazi Barotha Project (b) Mangla Dam
(c) Tarbela Dam (d) Warsak Dam
- viii. With the cooperation of the World Bank, the Indus Waters Treaty between Pakistan and India was settled in:
(a) 1950 (b) 1958
(c) 1960 (d) 1962
- ix. The largest sector of Pakistan's economy is:
(a) trade (b) industry
(c) agriculture (d) services
- x. Who came into power in Pakistan in 1958?
(a) General Sikander Mirza (b) General Muhammad Ayub Khan
(c) General Yahya Khan (d) General Zia-ul-Haq

Give short answers:

- i. Write the definition of economic progress as given by Professor Arthur Lewis.
- ii. Which organization was established in 1975 for the development of economic resources?
- iii. What is meant by small industry?
- iv. Make 3 suggestions to solve agricultural problems in Pakistan.
- v. What is meant by exports and imports?
- vi. Narrate the uses of gypsum.
- vii. Write the name of 5 cities of Pakistan where dry-ports are established.
- viii. To which countries does Pakistan export sports goods?
- ix. Narrate 4 important problems being faced by the agricultural sector of Pakistan.

(Part-2)

Give detailed answers.

- i. Explain the important problems being faced by our agricultural sector.
- ii. Explain what the cottage, small and large scale industries of Pakistan are.
- iii. Narrate the importance of resources of energy for development.
- iv. Discuss the production of important energy resources in Pakistan and their usages.
- v. Study the foreign trade of Pakistan, its composition, direction and changes in

balance.

- vi. Explain the importance of the seaports and dry ports of Pakistan.
- vii. Study the economic development of Pakistan from 1947 to 1970.
- viii. Explain the reserves, economic value and distribution of metallic and nonmetallic minerals.
- ix. Discuss the role of agriculture in the economy of Pakistan.
- x. Study the economic development of Pakistan after 1980.

Activity

1. Divide the class into 3 groups and give a topic to each- coal, petroleum, natural gas. Then discuss on the advantages of energy sources and their reserves. After 15 minutes each group has to give the teacher points in written as discussed by them.
2. They have to study the map of Pakistan which displays areas where there are mineral reserves. Then they have to tell where the following are found- natural gas, petroleum, coal, marble, copper and salt.
3. Make a chart of the exports and imports of Pakistan and display in the classroom.

Population, Society and Culture of Pakistan

Students' Learning Outcomes

After studying this chapter, the students will be able to:

1. Discuss the growth and distribution of population in Pakistan.
2. Analyse the rural-urban composition of Population and the geographical distribution.
3. Discuss the gender composition of population in Pakistan.
4. Explain the basic features of Pakistani society and the major social problems faced by it.
5. Discuss the educational and health conditions in Pakistan.
6. Identify the major features of Pakistan's culture and commonality in regional cultures leading to National Integration and cohesion.
7. Trace the origin and evolution of national and regional languages.
8. Trace the role of minorities in Pakistan with specific reference to the Quaid-e-Azam's speech of 11 August 1947, defining their status.